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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/003,574

10/24/2001

Hannu Kuoksa

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11/24/2009

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EXAMINER

HENDRICKSON, STUART L

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/003,574	<b>Applicant(s)</b> KUOKSA, HANNU	
	<b>Examiner</b> Stuart Hendrickson	<b>Art Unit</b> 1793	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 7/13/09.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-12,14,15 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-12,14,15 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-6, 8-12, 14, 15, 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no disclosure of 'updating the model'. In fact, this appears impossible since the coefficients are already hardwired into the computer control and calculation program. Clarification is requested. See also Office Action 11/2/04.

Claims 1-6, 8-12, 14, 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baines 5822220 taken with Mosow 5213663, Hultman et al. 4311666, Engdahl 4762590, Bertelsen CA 1198558 and Puhakka article.

Baines teaches in columns 5 and 9 computer control of a causticization process. The computer can monitor any parameter characteristic of the system and send via feedback loop controls to other inputs to achieve a stable reaction system. The differences versus the claims is what variables are monitored. Musow teaches in columns 2 and 4 that each system can have a different variable measured, like titratable alkali or density. Hultman teaches the measurement of green density and control of white infeed- see col. 1 lines 20-25 and col. 10 lines 10-15. Concerning the addition of white liquor to the process, Engdahl teaches this in col. 3 and fig. 1. Bertelsen teaches on pgs. 15-17 measuring the TTA and conductivity, and indicates that any parameter can be measured, depending upon the system. Page 25 thereof teaches measuring the density of the green liquor, and provides a good summary of the teachings of the reference. Page 3 teaches recycling the white liquor to the green liquor for complete reaction. The Puhakka article teaches monitoring 'alkali strength' and TTA.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to control the infeeds as in Hultman and monitor the density or alkali in the process of

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Baines, using the methods of the supporting references, because doing so asserts control over the process for monitoring for optimum results. Adding white liquor is an obvious expedient to form the desired carbonate product. Note that processes can be optimized (In re Boesch 205 USPQ 215). The workings of how the computer makes calculations (claims 8, 12, 14) are deemed conventional as how computer control programs work- see Baines col. 8-9. Choosing coefficients which accurately model reality is an obvious expedient, to assure efficiency.

Applicant's arguments filed 7/13/09 have been fully considered but they are not persuasive. Previous arguments and comments are incorporated herein by reference, as are those of the Foreign Patent Office decision. It appears that the arguments are duplicates of what is on the record; suffice it to note that the present submission has broadened the claims by deleting a required step and also provided arguments from a foreign Patent Office as to why the claims should not be patented. Thus, the present claims remain rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.

/Stuart Hendrickson/  
Primary examiner Art Unit 1793